Missouri Grade 9

# LineUp With Math<sup>TM</sup> Alignment Missouri Mathematics Grade-Level Expectations

### **Strand: Number and Operations**

3. Compute fluently and make reasonable estimates

### E. Use proportional reasoning

## **Grade-Level Expectation**

Solve problems involving proportions. (MA 1 3.3)

## LineUp With Math<sup>TM</sup> Activities

--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.

## Strand: Algebraic Relationships

4. Analyze change in various contexts

#### A. Analyze change

## **Grade-Level Expectation**

Analyze linear functions by investigating rates of change and intercepts. (MA 4 1.6,4.1)

## LineUp With Math<sup>™</sup> Activities

--Use an interactive simulator to identify distance, rate, time conflicts in air traffic control problems and resolve the conflicts by varying plane speeds or changing plane routes.

## **Strand: Geometric and Spatial Relationships**

- 4. Use visualization, spatial reasoning and geometric modeling to solve problems.
- B. Draw and use visual models

### **Grade-Level Expectation**

Draw or use visual models to represent and solve problems (MA 2 3.1)

# LineUp With Math TM Activities

--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.

#### Strand: Measurement

- 1. Understand measurable attributes of objects and the units, systems and processes of measurement.
- A. Determine unit of measurement

#### **Grade-Level Expectation**

Identify and justify appropriate units of measure for velocity. (MA 1,2 3.1,4.1)

## LineUp With Math<sup>™</sup> Activities

--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.